REMARKS

By this Reply, claims 1, 19, 37, 38, 42, 44, 46 and 47 are amended. Claims 1-47 remain pending in this application, with claims 1, 19, 37, 42, 44 and 46 being independent. Support for the claim amendments can be found throughout the disclosure.

In the Office Action of June 10, 2008 ("Office Action"), claims 37-41 were rejected under 35 U.S.C. § 112, second paragraph; claims 1-3, 5-9, 13, 17-21, 23-27, 31, 36 and 42-47 stand rejected under 35 U.S.C. 103(a) based on U.S. Patent No. 6,462,748 ("*Fushiki*") in view of U.S. Patent Application Pub. No. US 2002/0031256 ("*Hiramatsu*"); and claims 4, 10, 14, 22, 28, 32 and 37-41 were rejected under 35 U.S.C. 103(a) based on *Fushiki* and *Hiramatsu* and further in view of U.S. Patent Application Pub. No. 2003/0142222 A1 ("*Hordley*"). The Office Action objected to claims 11, 12, 15, 16, 29, 30, 33 and 34 as being dependent upon a rejected base claim, indicating that these claims are drawn to allowable subject matter.

The Examiner's indication of allowable subject matter is acknowledged with appreciation. The rejections are addressed in turn below.

Section 112 rejection

The Office Action rejected claims 37-41 under 35 U.S.C. 112, second paragraph, as being indefinite, asserting that "it is unclear what is meant by 'a matrix followed by curves in a pipeline of a defined color profile architecture' [as recited in claim 37] and how it relates to the transformation process." Office Action, page 3. The Office Action further asserts that "it is unclear what is meant by 'the matrix followed by the curves followed by an additional matrix' [as recited in claim 38] and how it relates to the transformation process." *Id.* In rejecting claims 37-41, the Office Action avers that the "closest embodiment of the specification regarding transformation comprising a matrix is paragraph [0008] which merely states the same thing and does not define the matrix, the curves or the pipeline in which the transformation is being conducted." Office Action, pp. 3-4.

Contrary to the assertions in the Office Action, the recitation of "a matrix followed by curves in a pipeline of a defined color profile architecture" does not render claim 37 and its dependent claims 38-41 indefinite under section 112, second paragraph. Likewise, the recitation

of "the matrix followed by the curves followed by an additional matrix" in claim 38 does not render claim 38, and its dependent claims 39 and 40, indefinite.

As MPEP § 2173.02 makes clear, "[t]he essential inquiry pertaining to this requirement [of definiteness] is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and particularity." The MPEP explains that "[t]he test for definiteness under 35 U.S.C. 112, second paragraph, is whether 'those skilled in the art would understand what is claimed when the claim is read in light of the specification.'" MPEP § 2173.02 (internal citations omitted). In this case, the features of claims 37-41 are indeed set forth with a reasonable degree of clarity and particularity, and a skilled artisan would be apprised of the scope of these claims from the claim language itself and the supporting disclosure. *See* MPEP § 2173.02.

The specification clearly describes a matrix, curves, an additional matrix and a pipeline consistent with what is recited in claims 37-41. *See*, e.g., pages 9-42, Fig. 7 and Fig. 8. In particular, page 11 of the specification discloses that curves "can denormalize the output from the CLUT [which can be used to implement a matrix + offset – *see*, e.g., pages 11, 16] and apply the nonlinear function of the CIELAB to XYZ conversion, and scale by 32768/65535." Page 33 describes that curves "can denormalize the output from the CLUT, apply the nonlinear function of the CIELAB to XYZ conversion, and apply the non-canonical channel offsets." The specification describes (e.g., pages 11 and 33) that curves can be implemented as type-4 parametricCurveType tags. Also, pages 13-16 of the specification discuss a "matrix + offset followed by 1D tables." In addition, pages 11-12 and 33 describe an additional, chromatic adaptation matrix. Paragraph [0008] is not the only portion of the specification describing the objected-to subject matter.

It is noted that claim language that gives a claim breadth does not render the claim indefinite. *See* MPEP § 2173.04. Moreover, "[s]ome latitude in the manner of expression and the aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire." MPEP § 2173.02. In this case, the meaning of the objected-to language of claims 37 and 38 can be readily ascertained by one skilled in the art from the claim as a whole, and the plain meaning of the claim language is further illuminated by at least the above-

noted portions of the specification. *See* MPEP § 2173.02. The section 112 rejection of claims 37-41 should therefore be withdrawn.

Without conceding the propriety of the section 112 rejection, claim 37 is amended to recite, *inter alia*, that the curves are used to (i) denormalize output of the matrix, apply a nonlinear conversion function and scale by a scaling factor, when non-canonical offsets are applied in the matrix, and otherwise to (ii) denormalize output of the matrix, apply a nonlinear conversion function and apply non-canonical offsets. Claim 38 is amended to recite, *inter alia*, "the additional matrix to denormalize curve output and apply a parameterized chromatic adaptation." A skilled artisan would be apprised of the scope of amended claims 37 and 38 from the amended claim language itself and the supporting disclosure.

In view of the above, withdrawal of the rejection of claims 37-41 under 35 U.S.C. 112, second paragraph, is requested. In referring to the specification, this paper does not intend to limit the scope of the claims to the example implementations shown in the drawings and described in the specification. Rather, the entitlement to have the claims interpreted broadly, to the maximum extent permitted by statute, regulation and applicable case law, is expressly affirmed.

Section 103 rejection of claims 1-3, 5-9, 13, 17-21, 23-27, 31, 36 and 42-47

The section 103 rejection of claims 1-3, 5-9, 13, 17-21, 23-27, 31, 36 and 42-47 should be withdrawn because *Fushiki* and *Hiramatsu* do not support a conclusion of obviousness with respect to these claims.

Independent claim 1 is amended, without narrowing its scope, to expressly state that which is implicit in the original claim, namely, that the "affecting" operation occurs during the "generating" operation. Thus, the claimed subject matter is clarified in amended claim 1, which recites a combination including:

> generating a color profile that conforms to a defined color profile architecture and that defines a multistage transform capable of translating a first color space to a second color space;

wherein . . . the generating the color profile comprises affecting two stages of the multistage transform based on the image parameters during the generating of the color profile.

Fushiki does not disclose or suggest "generating a color profile . . . that defines a multistage transform capable of translating a first color space to a second color space," as asserted in the Office Action. In asserting that *Fushiki* discloses "generating a color profile," the Office Action points to *Fushiki*'s "ICC profile" (124) and "color data" (126, 128). In asserting that *Fushiki* discloses "a multistage transform," the Office Action points to the "color processing operations" shown in Fig. 3 of the reference.

Fig. 3 of *Fushiki* shows "a processing sequence that involves conversions of a color object." Col. 3, lines 19-23; col. 6, line 47 – col. 7, line 6. It does not show a "a multistage transform capable of translating a first color space to a second color space," as asserted in the Office Action. *Fushiki*'s color processing operations include perceptual-based operations (gamut mapping, saturation adjustments and contrast), which are performed in the perceptual-based color space, and physical-based operations (alpha-masking, drop-shadow, and transparency), which are performed in the physical-based color space. *See* Fig. 3; col. 6, line 47 – col. 7, line 6. *Fushiki* does not disclose or suggest that any of these perceptual- or physical-based operations is "capable of translating a first color space to a second color space." The operations in Fig. 3 that might involve such a capability are the "conversion" operations, which convert the color object from one color space to another. *See* Fig. 3; col. 6, line 47 – col. 7, line 6. But even if *Fushiki*'s "conversions" were to translate one color space to another, the reference does not disclose or suggest that such a conversion involves a "multistage transform," as claimed. That is, the processing sequence of Fig. 3 might be a "multistage" process that includes conversion operations but there is no indication from *Fushiki* that a conversion operation itself involves a "multistage transform."

Furthermore, *Fushiki* does not disclose or suggest generating an ICC profile or color data that defines the processing sequence of Fig. 3 (which the Office Action equates with a "multistage transform"). Indeed, *Fushiki* does not disclose or suggest how the ICC profile or color data are generated, let alone generating a profile that defines the processing sequence of

Fig. 3 or any of the operations therein. The Office Action thus fails to show that *Fushiki* discloses or suggests "generating a color profile . . . that defines a multistage transform capable of translating a first color space to a second color space." For at least these reasons, the section 103 rejection of claim 1 is not supported by the applied art.

Moreover, *Fushiki* fails to disclose or suggest "affecting two stages of the multistage transform based on the image parameters during the generating of the color profile." Indeed, even if *Fushiki*'s processing sequence shown in Fig. 3 were a multistage transform (which is not conceded), the reference does not disclose or suggest "affecting" the operations "during the generating" of the ICC profile or color data. In fact, as noted previously, *Fushiki* does not disclose or suggest how the ICC profile or color data are generated or what occurs during generation.

Hiramatsu does not cure the deficiencies of *Fushiki*. *Hiramatsu* is directed to color matching. *See* Abstract; par. [0002]. *Hiramatsu* describes color conversion processing and color space profiles, but the reference does not disclose or suggest generating a color profile that defines a multistage transform capable of translating a first color space to a second color space, where the generating the color profile comprises affecting two stages of the multistage transform based on the image parameters during the generating of the color profile, as recited in claim 1. *See* Figs. 4, 14, 15, 16. Although *Hiramatsu* discusses color space profiles (Fig. 4, S401; Fig. 15, S1501) and conversion parameters (*see* par. [0025], [0083], [0085]), the reference does not disclose or suggest generating such a profile that defines a multistage transform capable of translating a first color space to a second color space, where two stages of the multistage transform are affected based on the image parameters during the generating of the color profile, as claimed. Indeed, *Hiramatsu* does not disclose or suggest that the obtained color space profiles define the color conversion processing or that any of the conversion processing is affected based on image parameters during generation of any such profile. Like *Fushiki*, *Hiramatsu* does not disclose or suggest how profiles are generated or what occurs during generation.

Accordingly, *Fushiki* and *Hiramatsu*—whether taken alone or in any combination—fail to teach or suggest each and every element of claim 1. In addition, no basis has been provided for concluding that it would have been obvious to a skilled artisan to bridge the gap between the

applied references and what is now claimed. *See* MPEP § 2141(III), 8th Ed., Rev. 6 (September 2007). For at least these reasons, the section 103 rejection of claim 1 should be withdrawn.

Moreover, the Office Action fails to provide a proper rationale supporting the proposed combination of *Fushiki* and *Hiramatsu*. The Office Action asserts the following (page 8):

> . . . it would have been obvious to one of ordinary skill in the art at the time of the invention to include in Fushiki the image conversion parameters taught by [*Hiramatsu*], as the benefits of using conversion parameters when color matching and processing, and by taking image characteristics with respect to color spaces and using said characteristics during processing, will allow higher computation processing speeds with color spaces ([*Hiramatsu*] – [0024], [0027], and [0028]).

These conclusory statements made in the Office Action do not properly support a combination of the applied references.

In particular, the Office Action fails to explain how combining *Fushiki* and *Hiramatsu* would in fact achieve the combination recited in claim 1. Even if *Hiramatsu*'s conversion parameters and image characteristics were consistent with "parameterized encoding . . . with image parameters," no explanation is provided as to how *Hiramatsu*'s conversion parameters and image characteristics would be combined with *Fushiki*'s color processing sequence to yield functionality for affecting two stages of a multistage transform based on the conversion parameters.

While pointing to higher computation processing speeds with color spaces as a reason for combining *Hiramatsu* with *Fushiki*, the Office Action provides no explanation regarding how combining *Hiramatsu*'s conversion parameters and image characteristics with the teachings of *Fushiki* would in any way affect computation processing speeds in *Fushiki*'s system. *Hiramatsu* discloses "high speed" color matching. *See* par. [0024], [0028]. *Hiramatsu* discloses determining a conversion parameter "by estimating the color reproduction range of the first device and the color reproduction range of the second device based on the respective data related to the specific color that are obtained" (par. [0025]). As the Office Action notes, *Hiramatsu* explains that "[s]ince the conversion parameter is determined based on the respective data related to the specific color of the first device and the second device, . . . higher computation processing

speed for parameter determination can be achieved when compared to the case in which the conversion parameter is determined based on numerous color data." Office Action, pp. 7-8; *Hiramatsu*, par. [0027]. Notably, *Hiramatsu*'s color matching is performed on an absolute color space using the determined conversion parameter. *See* Abstract; *see also* par. [0084], [0085].

According to *Hiramatsu*, the increase in computation processing speed results from performing color matching on an absolute color space using a conversion parameter determined based on the respective data related to the specific color of devices, rather than based on numerous color data. *See* Abstract, par. [0027]. The Office Action offers no explanation as to how such color matching functionality would be integrated into *Fushiki*'s color processing sequence in a manner that would increase a computation processing speed of *Fushiki*'s system, which selectively performs color processing operations (e.g., gamut mapping, saturation adjustment, alpha-masking, drop-shadow, transparency and contrast) in the more suitable one of two color spaces (perceptual-based and physical based) to optimize the quality and performance of color processing. *See Fushiki*, col. 6, lines 3-45; Fig. 3. Likewise, the Office Action fails to show why—other than to attempt to meet the terms of the claims—a skilled artisan considering *Fushiki* and *Hiramatsu* would have integrated *Hiramatsu*'s functionality for high-speed color matching in *Fushiki*'s system.

As articulated by the Supreme Court, "[a] patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex*, 127 S.Ct. 1727, 1731 (2007). According to the Court, it can be "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. The Office is respectfully reminded that even after *KSR*, "in formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed." *See* Memorandum dated May 3, 2007, to Technology Center Directors from Margaret A. Focarino, Deputy Commissioner for Patent Operations, re Supreme Court decision on KSR Int'l. Co., v. Teleflex, Inc. (emphasis added). In this case, the conjectural statements made in the Office Action do not suffice to establish obviousness with respect to claim 1.

Neither of the applied references suggests the desirability of the proposed combination, and the Office Action's finding of obviousness appears to be based on impermissible hindsight gleaned entirely from the present application. In rejecting claim 1, the Office Action has improperly pieced together isolated teachings from different references using the claim language as a roadmap. For at least these additional reasons, the section 103 rejection of claim 1 should be withdrawn.

Independent claim 19, although of different scope from claim 1, is amended to clarify the claimed subject matter (without limiting its scope) and recites features related to those of claim 1 discussed above. The section 103 rejection of claim 19 should be withdrawn for at least reasons similar to those presented above in connection with claim 1. The section 103 rejection of claims 2, 3, 5-9, 13, 17, 18, 20, 21, 23-27, 31, 35 and 36 should likewise be withdrawn, at least because each of these claims depends upon claim 1 or claim 19.

Independent claims 42 and 44, although of different scope, both recite *inter alia*:

> improving color accuracy of conversion of an image color space of an image by affecting two or more processing stage definitions of a transform-defining element in a color profile associated with a defined image processing pipeline, based on image parameters, such that the defined image processing pipeline transcodes an image component according to a range and an offset, the two or more processing stage definitions being affected during generation of the color profile, and the affecting comprising fitting output to input data scopes between two of the processing stage definitions, and the image comprising a parameterized encoding of the image color space with the image parameters defining the range and the offset of the image component of the image.

The Office Action rejects claims 42 and 44 based on *Fushiki* and *Hiramatsu* using the same rationale as that used in rejecting claim 1. *See* Office Action, pp. 17-18.

Fushiki and *Hiramatsu*—whether taken alone or in any combination—fail to teach or suggest at least affecting two or more processing stage definitions of a transform-defining element in a color profile during creation of the color profile, as recited in claims 42 and 44. *Fushiki* describes performing color processing operations (e.g., gamut mapping, saturation adjustment, alpha-masking, drop-shadow, transparency and contrast) in the more suitable one of

two color spaces (perceptual-based and physical based) to optimize the quality and performance of color processing. *See Fushiki*, col. 6, lines 3-45; Fig. 3. The reference does not disclose or suggest affecting two or more processing stage definitions of a transform-defining element in a color profile during creation of the color profile, as claimed. Although *Fushiki* discusses an ICC profile, the reference does not disclose or suggest "affecting" processing stage definitions of a transform-defining element in the ICC color profile "during generation" of the profile. Even if *Fushiki*'s processing sequence shown in Fig. 3 were to include processing stage definitions of a transform-defining element (which is not conceded), the reference does not disclose or suggest "affecting" the operations "during generation" of the ICC profile.

Hiramatsu does not cure the deficiencies of *Fushiki* with respect to claims 42 and 44. *Hiramatsu* describes color conversion processing and color space profiles, but the reference does not disclose or suggest affecting two or more processing stage definitions of a transform-defining element in a color profile during creation of the color profile, as claimed. Although *Hiramatsu* discusses color space profiles (Fig. 4, S401; Fig. 15, S1501) and conversion parameters (*see* par. [0025], [0083], [0085]), the reference does not disclose or suggest affecting two or more processing stage definitions of a transform-defining element in any such space profile, based on image parameters, during creation of the profile.

Fushiki and *Hiramatsu*—whether taken alone or in any combination—thus fail to teach or suggest each and every element of claims 42 and 44, and no basis has been provided for concluding that it would have been obvious to a skilled artisan to bridge the gap between the applied references and what is now claimed. *See* MPEP § 2141(III). In addition, for at least reasons similar to those presented above in connection with claim 1, a proper rationale supporting the proposed combination of *Fushiki* and *Hiramatsu* has not been established. For at least these reasons, the section 103 rejection of claims 42 and 44, and their respective dependent claims 43 and 45, should be withdrawn.

Independent claim 46 recites a combination including "means for taking image parameters into account across two or more processing stage definitions of a transform-defining element in a color profile associated with a defined image processing pipeline during generation

of the color profile for the image." The Office Action rejects claim 46 using the same rationale as that used in rejecting claim 1. *See* Office Action, page 18.

Fushiki does not disclose or suggest "taking image parameters into account across two or more processing stage definitions of a transform-defining element in a color profile associated with a defined image processing pipeline during generation of the color profile for the image," as recited in claim 46. Although *Fushiki* discusses an ICC profile, the reference does not disclose or suggest "taking image parameters into account across two or more processing stage definitions of a transform-defining element" in the ICC color profile "during generation" of the profile. Even if *Fushiki*'s processing sequence shown in Fig. 3 were to include processing stage definitions of a transform-defining element (which is not conceded), the reference does not disclose or suggest "taking image parameters into account across two or more processing stage definitions" the operations "during generation" of the ICC profile.

Hiramatsu does not cure the deficiencies of *Fushiki* with respect to claim 46. *Hiramatsu* does not disclose or suggest "means for taking image parameters into account across two or more processing stage definitions of a transform-defining element in a color profile associated with a defined image processing pipeline during generation of the color profile for the image," as claimed. Although *Hiramatsu* discusses color space profiles (Fig. 4, S401; Fig. 15, S1501) and conversion parameters (*see* par. [0025], [0083], [0085]), the reference does not disclose or suggest "taking image parameters into account across two or more processing stage definitions of a transform-defining element" in any such space profile "during generation" of the profile.

Fushiki and *Hiramatsu*—whether taken alone or in any combination—thus fail to teach or suggest each and every element of claims 46, and no basis has been provided for concluding that it would have been obvious to a skilled artisan to bridge the gap between the applied references and what is now claimed. *See* MPEP § 2141(III). In addition, for at least reasons similar to those presented above in connection with claim 1, a proper rationale supporting the proposed combination of *Fushiki* and *Hiramatsu* has not been provided. For at least these reasons, the section 103 rejection of claim 46, and its dependent claim 47, should be withdrawn.

Section 103 rejection of claims 4, 10, 14, 22, 28, 32 and 37-41

The section 103 rejection of claims 4, 10, 14, 22, 28, 32 and 37-41 should be withdrawn because *Fushiki*, *Hiramatsu* and *Hordley* do not support a conclusion of obviousness with respect to these claims.

Claims 4, 10 and 14 depend upon independent claim 1, and claims 22, 28 and 32 depend upon independent claim 19. As discussed above, *Fushiki* and *Hiramatsu* fail to disclose or suggest each and every feature of independent claims 1 and 19. *Hordley*, which was applied to certain features of dependent claims, does not cure the deficiencies of *Fushiki* and *Hiramatsu* with respect to independent claims 1 and 19. Furthermore, no basis has been provided for concluding that it would have been obvious to a skilled artisan to bridge the gap between the applied references and what is now claimed. *See* MPEP § 2141(III).

Accordingly, *Fushiki*, *Hiramatsu* and *Hordley*—whether taken alone or in any combination—fail to render obvious claim 1 or claim 19 or their respective dependent claims 4, 10, 14, 22, 28 and 32. The section 103 rejection of claims 4, 10, 14, 22, 28 and 32 based on these references should therefore be withdrawn.

Moreover, with regard to claims 4 and 22, neither *Fushiki*, *Hiramatsu* nor *Hordley*, nor any combination thereof, discloses or suggests that the image parameters of the parameterized encoding define ranges, offsets, and bit depths of image components of the image, and the color profile comprises a bit-depth independent color profile, as claimed. *Fushiki* discusses an ICC profile and *Hiramatsu* discusses color space profiles, but these references both fail to disclose or suggest generating a "bit-depth independent color profile," where the bit-depth independent color profile defines a multistage transform capable of translating a first color space to a second color space, and where the generating comprises affecting two stages of the multistage transform based on the image parameters during the generating of the bit-depth independent color profile, as required by claims 4 and 22. Indeed, the Office Action appears to acknowledge these deficiencies in *Fushiki* and *Hiramatsu*. *See* Office Action, pp. 19-20.

In rejecting claim 4, the Office Action points to *Hordley*'s disclosure regarding variation in depth of color and altering the magnitude of the illumination color temperature to increase or decrease the warmness or color depth. *See* Office Action, p. 20, *Hordley*, par. [0096]. The

Office Action further notes *Hordley*'s disclosure regarding altering an illumination intensity vector to brighten or darken the overall picture. *See* Office Action, p. 20; *Hordley*, par. [0098]. The Office Action asserts that *Hordley* discloses a modification based on bit or color depth, where manipulation of the bit depth parameter enhances the final image without altering the illumination or the original object producing the image. *Id.*

Whether or not *Hordley* discloses modifications based on bit depth, the reference does not disclose or suggest generating a "bit-depth independent color profile," where the bit-depth independent color profile defines a multistage transform capable of translating a first color space to a second color space, and where the generating comprises affecting two stages of the multistage transform based on the image parameters during the generating of the bit-depth independent color profile, as required by claims 4 and 22. Even if *Hordley*'s color depth were consistent with the claimed "bit-depths" (which is not conceded), the reference does not disclose or suggest generating a "bit-depth independent color profile," as claimed. The Office Action appears to contend that *Hordley* discloses adjustments to the color depth that are independent of the color profile. *See* Office Action, page 20. Making adjustments to the color depth that are independent of a color profile does not constitute generating a color profile that is "bit-depth independent," as claimed. Thus, contrary to the Office Action's assertion, all of the elements of claims 4 and 22 are not known in view of *Fushiki* and *Hiramatsu* in view of *Hordley*. *See* Office Action, page 20.

Additionally, a proper rationale supporting the proposed combination of *Fushiki*, *Hiramatsu* and *Hordley* with respect to claims 4 and 22 has not been provided. The Office Action asserts the following (page 20):

> . . . it would have been obvious to one of ordinary skill in the art at the time of the invention to include in Fushiki and [*Hiramatsu*] the image conversion parameter of bit or color depths taught by Hordley, . . . as adjustments to the bit or color depth are independent of the color profile therefore an enhancement of a final image without altering the illumination or the original object producing the image can be made (Hordley – [0098]).

These conclusory statements made in the Office Action do not properly support a combination of the applied references.

In particular, for at least the reasons explained above in connection with claim 1, the Office Action fails to provide a proper rationale for combining *Fushiki* and *Hiramatsu*. The Office Action further fails to show how combining these references with *Hordley* would in fact achieve the combination recited in claims 4 and 22. Even if *Hordley* were to disclose bit depths and adjustments to the bit depths that are independent of color profile (which is not conceded), combining these features with the proposed *Fushiki-Hiramatsu* combination would still not yield the combination recited in claims 4 and 22, which includes generating a color profile that is "bit-depth independent."

The Office Action points to enhancing a final image without altering the illumination or the original object producing the image as a reason for combining the applied references. The Office Action, however, provides no explanation regarding how *Hordley*'s color depth features would be integrated with the teachings of *Fushiki* and *Hiramatsu* to achieve this result. Likewise, the Office Action fails to show why—other than to attempt to meet the terms of the claims—a skilled artisan considering the applied references would have integrated *Hordley*'s supposed functionality for enhancing a final image without altering the illumination or the original object producing the image in the proposed *Fushiki-Hiramatsu* system. Neither of the applied references suggests the desirability of the proposed combination, and the Office Action's finding of obviousness appears to be based on impermissible hindsight gleaned entirely from the present application. The Office Action has improperly pieced together isolated teachings from different references using the claim language as a roadmap. For at least these additional reasons, the section 103 rejection of claims 4 and 22 should be withdrawn.

Independent claim 37 recites a combination including:

> a color management software component that generates a bit-depth independent color profile for an image comprising a parameterized encoding of an image color space with image parameters defining ranges, offsets and bit depths of image components of the image, wherein the color management software component generates the color profile by representing a transformation comprising a matrix followed by curves in a pipeline of a defined color profile architecture while increasing processing precision governed by the color profile based on the parameterized encoding, and wherein the color management software component is operable to use the

curves to (i) denormalize output of the matrix, apply a nonlinear conversion function and scale by a scaling factor, when non-canonical offsets are applied in the matrix, and otherwise (ii) denormalize output of the matrix, apply a nonlinear conversion function and apply non-canonical offsets.

Neither *Fushiki*, *Hiramatsu* nor *Hordley*, nor any combination thereof, discloses or suggests at least a color management software component that "generates a bit-depth independent color profile" and that is operable to "use the curves to (i) denormalize output of the matrix, apply a nonlinear conversion function and scale by a scaling factor, when non-canonical offsets are applied in the matrix, and otherwise (ii) denormalize output of the matrix, apply a nonlinear conversion function and apply non-canonical offsets," as claimed. Although *Fushiki* and *Hiramatsu* discuss profiles, neither of these references discloses a color management software component that "generates a bit-depth independent color profile" and that is operable to "use the curves" in the manner recited in claim 37. *Hordley* describes color depth and intensity adjustments but, like *Fushiki* and *Hiramatsu*, fails to disclose or suggest a color management software component that "generates a bit-depth independent color profile" and that is operable to "use the curves" in the manner claimed.

Neither *Fushiki*, *Hiramatsu* nor *Hordley*, nor any combination thereof, teaches or suggests each and every element of claim 37, and no basis has been provided for concluding that it would have been obvious to a skilled artisan to bridge the gap between the applied references and what is now claimed. *See* MPEP § 2141(III). For at least these reasons, the section 103 rejection of claim 37, and its dependent claims 38-41, should be withdrawn.

Allowable Subject Matter

The Office Action objected to claims 11, 12, 15, 16, 29, 30, 33, and 34 as being dependent upon a rejected base claim, indicating that these claims would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims. Claims 11, 12, 15 and 16 depend upon independent claim 1, and claims 29, 30, 33 and 34 depend upon independent claim 19. For at least the reasons discussed above, the rejections of

base claims 1 and 19 should be withdrawn. The objection to dependent claims 11, 12, 15, 16, 29, 30, 33 and 34, therefore, should likewise be withdrawn.

Conclusion

This paper requests the Examiner's reconsideration of the application in view of the amendments and the foregoing remarks, and the timely allowance of pending claims 1-47.

It is believed that all pending issues in the outstanding Office Action have been addressed by this paper. The Office Action, however, contains a number of statements reflecting characterizations of the related art and the claims. Whether or not any such statement is identified herein, this paper declines to automatically subscribe to any statement or characterization in the Office Action. The absence of a reply to any specific statement or assertion in the Office Action does not signify agreement with or concession of any statement of characterization in the Office Action. In addition, there may be reasons for patentability of any or all pending or other claims that have not been expressed above. Nothing in this paper should be construed as an intent to concede any issue with regard to any claim, expect as specifically stated in this paper.

If there are any questions regarding this paper or the application generally, a telephone call to the undersigned would be appreciated since this may expedite prosecution of the application.

It is hereby petitioned that the period for response to the Office Action be extended for one (1) month. The Petition for Extension of Time fee of $130 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please grant any additional extensions of time required to enter this paper and apply any other required charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: October 9, 2008

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